

## **Analysis of Papuan Students' Learning Motivation in Online Learning for Elementary Science Physics Courses**

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### **ABSTRACT**

One of the policies made by the government to break the chain of spread of the Covid-19 virus is in the education sector, namely changing the face-to-face learning system into online learning. However, in online learning itself, not all students are successful in its application, there are many obstacles and obstacles they experience. The purpose of this study was to analyze the learning motivation of Papuan students in online learning. The method used in this research is descriptive with a qualitative approach. The results of this study say that Papuan students' learning motivation in online learning can be said to be good even though there are several obstacles related to online learning techniques. The results of the study were seen based on indicators of learning motivation, namely, the desire to succeed, the encouragement and curiosity, the increasing activities in learning, the existence of a conducive learning environment, the appreciation in learning.

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## **INTRODUCTION**

The corona virus and disease (COVID) pandemic since the beginning of 2020 has changed the world order in various sectors. Almost all countries in the world are affected by the corona virus, including Indonesia. The rapid spread and transmission of the virus has forced the Indonesian government to make many policies to break the chain of transmission. One of the policies taken by the Indonesian government in the education sector is to close schools and campuses and implement an online learning system from home. The learning from home policy adopted by the government requires educators and lecturers to make adjustments to the learning process quickly. Educators must adjust the learning process which is usually face-to-face to be replaced by online learning. This adjustment must be made by all levels of education from early childhood education to university level without exception

Likewise, the lecture process held in the elementary school educator education study program (PGSD) is a collaboration program between the Mappi Regency Government and the University of Sanata Darma for Papuan students. Lecturers of course also start lectures online by trying to use

methods and tools that are deemed appropriate to the material being taught, with the hope that the quality of lectures does not decrease when compared to offline lectures. Online learning allows students to have the flexibility of learning time so they can study anytime and anywhere. In addition, students can interact with lecturers using several applications such as video conferencing, telephone or live chat, zoom or via whatsapp group. This learning activity is an educational innovation to answer the challenge of the availability of varied learning resources. The success of a model or learning media depends on the characteristics of the students. It is revealed (Nakayama et al., 2014) that all literature indicates that not all students will be successful in online learning, this is due to differences in learning environment factors and student characteristics.

One of the successes in learning is related to the motivation of students (Schunk, 2010) where this learning motivation can provide encouragement for students to take an action that aims in the desired direction both mentally and physically, so that the activities carried out become very important. in motivation. According to (Selvi, 2010) explaining that online learning is often required to be more motivated because the learning environment usually relies on motivation and related characteristics of curiosity and self-regulation to involve in the learning process. Based on this opinion, the motivation of students can be formed, one of which is the use of technology, where technology is currently seen as a motivation that provides a number of learning qualities that are recognized as important, which can foster challenges, curiosity, and novelty in learning. According to (Hamzah B. Uno, 2009) motivation is a person's encouragement to change behavior in a better direction to achieve his goals. Motivation to learn can arise because of intrinsic factors, in the form of desire and desire to succeed and encouragement of learning needs, hopes for ideals. While the extrinsic factors are awards, a conducive learning environment, and interesting learning activities (Hamzah B. Uno, 2009).

Lee in (Nasrah & Muafiah, 2020) that in online learning, intrinsic motivation consists of self-motivation (self-motivation), self-discipline, self-adaptation, feeling indifferent (feeling indifferent) while extrinsic motivation consists of online learning, lecturers /teacher, use of online learning media, exams/assignments, family, friends and environment. A person's motivation is one of the determinants of success in learning, intrinsic motivation has a significant effect on learning, especially online learning (Baber, 2020). Research conducted (Faridah et al., 2020) also said that learning motivation is divided into two, namely intrinsic motivation and extrinsic motivation, where intrinsic motivation arises from within itself so that students will be very involved in learning to achieve their academic goals. In addition, students who are highly motivated tend to work harder in learning in order to achieve the goals they want. While extrinsic motivation is motivation that arises in the form of encouragement from others to encourage someone to do a goal. This is in line with the opinion expressed (Sardiman, 2012) that a person will be successful in learning if there is an urge or desire to learn in him or her, and this desire or urge is referred to as motivation. intrinsic and extrinsic motivation. Intrinsic motivation is the motivation that arises from one's self and extrinsic motivation is the motivation that arises due to stimulation from the surrounding environment. According to (Hamzah B. Uno, 2009) there are 8 indicators of learning motivation, namely concentration, curiosity, enthusiasm, independence, readiness, enthusiasm or encouragement, never give up, and self-confidence.

Meanwhile (Maliasih et al., 2017) said that learning motivation is a driving force within students that creates motivation in learning, ensures the continuity of all learning activities, thus the goals that students want can be achieved. Online learning will run effectively if students have the motivation to learn in learning, especially in learning science subjects in elementary physics. Lecturers must make maximum efforts so that students can maximize learning motivation because success in learning grows when learning motivation is well formed, one way to form this learning motivation is the efforts of educators (lecturers or teachers) in generating learning motivation from students themselves. . This is in accordance with the opinion (Emda, 2018) which states that learning motivation must be generated from within students so that students are motivated to learn. According (Dimiyati & Mudjiono, 2010) efforts that can be made by educators include optimizing the

application of learning principles, optimizing the dynamic elements of learning and learning, optimizing the use of students' experiences and abilities, and optimizing learning goals and aspirations.

Based on observations made by researchers at the University of Sanata Dharma, it was found that students who take online lectures in elementary science physics courses do not all have indicators of learning motivation, this is shown by the large number of students who do not take online lectures, and the lack of student interest. against online learning due to environmental factors such as network constraints. This causes online learning which should be able to increase student motivation in learning, on the contrary, their readiness to learn becomes hindered, feels bored, and does not understand the material presented because considering that this Elementary Physics Science course is a subject that is oriented to direct experience, so for According to students, the elementary science physics course would be more interesting if it was done in direct practice compared to online learning. Based on this background, the authors are interested in conducting research on "analysis of Papuan students' learning motivation in online learning for Elementary School Physics Science courses at Sanata Dharma University".

## METHODS

The type of research used in this research is descriptive research with a qualitative approach. This research was conducted from March to May 2021 at Sanata Dharma University, which is located on Jalan Affandi Santren Caturtunggal, Depok District, Sleman Regency, Yogyakarta Special Region. Determination of data sources in this study was carried out purposively. Those are lecturers who teach subjects and Papuan students of S1 PGSD at Sanata Dharma University in the second semester of class F totaling 47 students. The instrument used in this study used interviews. The interview is in the form of a questionnaire which is in google form so that it is easily accessible by students and lecturers, indicators are made in a questionnaire that is used to refer to indicators of learning motivation from Hamzah B. Uno's opinion, as for indicators of learning motivation according to Hamzah B. Uno (Hamzah B. Uno, 2009), are presented in the table below.

**Table 1.** Indicators of Learning Motivation

Sub Aspect	Indicator
There is a desire to learn	<ol style="list-style-type: none"> <li>1. Implementation of learning in the Elementary Physics Science course through online learning</li> <li>2. Elementary Physics Science learning strategies in online learning</li> </ol>
There is an encouragement of curiosity, the need for learning	<ol style="list-style-type: none"> <li>1. The advantages and disadvantages of online learning in elementary science physics courses</li> <li>2. Enthusiasm of students in learning</li> </ol>
There are interesting activities in learning	<ol style="list-style-type: none"> <li>1. Methods and media used in online learning for elementary science physics courses</li> <li>2. Student activity in online learning</li> </ol>
There is a conducive learning environment	<ol style="list-style-type: none"> <li>1. Obstacles when learning online for elementary science physics courses</li> <li>2. Learning tools used in online lectures</li> </ol>
There is an appreciation in learning	<ol style="list-style-type: none"> <li>1. Feedback in online learning</li> </ol>

Test the validity of the data used in this study is by triangulation. The steps taken in data analysis according to Mathew B. Miles and A. Micheal Huberman (2009: 16-21), are as follows:

a. *Data Reduction* (Reduksi Data)

Reducing data means summarizing, selecting the main points, focusing on the important things, looking for themes and patterns and discarding unnecessary data. So that the reduced data will provide a clearer picture, and make it easier for researchers to collect further data.

b. *Data Display* (Penyajian Data)

After the data is reduced, the next step is to present the data. Presenting simple data or data narratives in the form of words can be done in the form of brief descriptions, charts, relationships between categories, flowcharts and the like. Through the presentation of data on the analysis of learning motivation and Papuan students in online learning for Elementary School Physics, the data will be organized and arranged in a relationship pattern, so that it will be easier to understand.

c. *Conclusion Drawing/Verification* (Verifikasi dan Simpulan)

The third step in analyzing qualitative research data according to Miles and Huberman is drawing conclusions and verification. In the previous data collection stage, the researcher had made temporary conclusions. However, if the temporary conclusions are supported by valid and consistent evidence when the researcher returns to the field to collect data, then the conclusions put forward are credible conclusions. At this verification stage, the researcher checked the results of these conclusions to be used as a definite conclusion from the results of research on the analysis of learning motivation and Papuan students in online learning for elementary science physics courses.

### 3. FINDINGS AND DISCUSSION

The results of observations and interviews supported by relevant research articles regarding learning motivation in online learning generally have a positive impact. Improvements, influences and obstacles occur in the studies that have been carried out. Good in improving learning outcomes, learning motivation, and student independence in online learning. To find out more clearly about the results of existing research, the following table summarizes the relevant research reviews

**Table 2.** Summary of Relevant Research Reviews

<b>Authors</b>	<b>Research methods</b>	<b>Result</b>
(Fitriyani et al., 2020)	Quantitative Approach with Survey Method	The results of this study indicate that the 6th semester students' learning motivation in online learning is very good, where the score from the presentation of research results is 80.27%. Students who have high learning motivation have the desire to get high scores to increase so that students will be more diligent and active in learning.
(Fitriani et al., 2020)	Quantitative Approach type ex po facto	The results shown by this study prove that there is a significant relationship between achievement motivation and student learning independence during online learning, where the higher the student's learning motivation, the higher the independence in learning
(Lin et al., 2017)	Literature Rievew	This study explains the effect of digital learning on learning motivation and learning outcomes. The results of this study indicate that online learning has a positive effect on learning motivation and student learning outcomes than traditional learning.
(Rafiola et al.,	Analytical description	This study aims to examine the effect of learning

2020)		motivation, independence, and mixed learning on learning achievement. The results of the study said that learning motivation and independence had no significant effect on learning outcomes, while mixed learning had a significant effect on learning achievement.
(Harandi, 2015)	Qualitative	This study aims to determine the use of e-learning in higher education leads to the influence of student learning motivation. The results of this study say that there is a significant influence between the use of e-learning and students' learning motivation
(Faridah et al., 2020)	Partial Least square theory with smartPLS 2.0	This study aims to determine the impact of digital learning on students' learning motivation during this covid-19 pandemic. The results of this study say that digital learning has a positive impact on student motivation during the covid-19 pandemic, this is evidenced by students being more often involved in digital learning so that their learning motivation increases, thus learning objectives will be achieved.

The results of observations and interviews which are supported by documents show several findings regarding the learning motivation of Papuan students in online learning for elementary science physics courses. The following is a description of the results of research on Papuan students' learning motivation in online learning for elementary science physics courses at Sanata Dharma University. In the learning of elementary science physics courses at Sanata Dharma University, it is done online (in a network). Lecture activities are held every Wednesday at 14.00 through the Zoom meeting platform. Based on the results of observations, interviews and documentation, researchers obtained data regarding learning motivation in online learning in the Elementary School Physics Science course, the following are the results of the study:

**a. There is a desire to learn**

Learning activities for elementary science physics courses at Sanata Dharma University are carried out online. In lecture activities there are several students who are not present in the online lecture process, the student signal is not stable, and disables the camera during lectures. Based on the results of the study, some students also have a desire to learn face-to-face. This student's desire is because in the online process of learning elementary science physics courses, they experience a few difficulties, obstacles, and obstacles including network difficulties and lack of direct practice in learning so that it reduces the enthusiasm for discussion. If technical obstacles like this can be minimized, online lectures will run well. It can be seen from the results of observations that in every meeting there are always those who ask questions even though it is done by students who consistently ask every meeting. In addition, the questions asked are also related to the life around them, this shows that they are trying to relate what they have learned to solve their daily problems according to the Papuan context. Students also try to get involved in LMS, from participation data in LMS 47 students access LMS, although not all of them are involved in Zoom. Following the activities in it: watching videos, doing quizzes, doing simulations with a virtual lab. Some Papuan students are also enthusiastic when playing games, they finish the game until the time outside of lectures, when lecture hours are over. They want to achieve the maximum score, even the maximum score can be 106 game points. During the practicum at the dormitory, in a WA conversation they said if there was a broken tool, a leaky balloon, then they tried to borrow a friend's balloon. Thus, it can be concluded

that online learning in this elementary science physics course makes students' desire and desire to succeed be hampered because of some of the obstacles above.

**b. There is an encouragement of curiosity, the need for learning**

Online lecture activities are carried out according to the context of the student's home region, especially Papua. This is because the application of lectures according to the regional context will make students more enthusiastic and interested in learning, so that student learning motivation will increase, in addition to activities that encourage students to continue taking lectures online even though there are several obstacles, namely the advantages of online learning, including is the use of LMS on material required for practice, lecturers use various media such as LMS, learning.usd.ac.id; WA; Zoom, communication media, learning media: videos, films, games, virtual labs, contextual cases in Papua. Thus, the advantages of online learning for elementary science physics courses can encourage Papuan students in lecture activities.

**c. There are interesting activities in learning**

During the research, it was seen that several students were enthusiastic in lectures, interested, and enthusiastic. Lecturers use various media to support online learning, such as videos from YouTube, and simulations from the virtual lab, namely phet. Papuan students' enthusiasm can be seen when lecturers give assignments to try phet simulations, Papuan students express their opinions on what they get after their experiments. Some Papuan students also ask if there is material that has not been understood. Thus, it can be concluded that the use of varied media is also needed in online learning because it can make learning activities interesting, and make students play an active role in the online learning process.

**d. There is a conducive learning environment**

The environment greatly affects the smoothness of online learning. Based on the observations made, there were some students who were not present in online lectures, there were also some students who went in and out of the zoom room, as well as students who did not turn on the camera during recovery. This is because the obstacles that Papuan students experience include network difficulties. Papuan students studying at Sanata Dharma University are provided with facilities in the form of dormitories for them to live in, they can use dormitory facilities to support the online lecture process, including the use of dorm wifi. However, in reality the wifi in the dormitories often experiences network disturbances, making it difficult for Papuan students to participate in online learning. Thus, it can be concluded that this conducive environment can affect Papuan students' learning motivation. The better the conditions of the learning environment, such as an adequate internet network, the better the learning motivation will be.

**e. There is an appreciation in learning**

Students' online learning activities followed well, some students were active in the lecture process, asking questions, and expressing opinions. Papuan students also do the assignments given by the lecturer according to their time. This is because every time they do a good job, the lecturer in charge of the course provides feedback and motivation to learn to Papuan students, while for students who do not do the lecturer's assignment, they will give a reduction in their scores to practice student responsibility. Thus, it can be concluded that rewards in learning can motivate Papuan students to do online learning. With this award in learning, students can do the assignments given on time.

#### 4. CONCLUSION

Based on the results of the research and discussion that have been described previously, it can be concluded that Papuan students' learning motivation in online learning for elementary science physics courses is going well with a few obstacles. This conclusion is measured based on the indicators for measuring learning motivation proposed by Hamzah (2009), namely: The existence of desire and desire is successfully seen when Papuan students participate in online learning on time, an

encouragement of curiosity about learning needs is seen when students actively ask questions about the material provided. not yet understood, the existence of interesting activities in learning can be seen from the use of media and learning tools used by lecturers are quite varied, the existence of a conducive learning environment can be seen from the facilities used by students to support online learning such as cellphones, laptops, and internet networks that are quite adequate, and the existence of appreciation in learning can be seen from the provision of rewards or punishments given by lecturers to Papuan students who do and do not do assignments.

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